

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Harry A. ATWATER, Jr. et al.

Title:

WAFER BONDED VIRTUAL SUBSTRATE AND METHOD FOR FORMING THE SAME

Appl. No.:

10/761,918

Filing Date:

1/20/2004

Examiner:

Duy-Vu DEO

Art Unit:

1765

Confirmation

4108

Number:

### TERMINAL DISCLAIMER

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Your Petitioner, California Institute of Technology, having its principal place of business at 1200 East California Boulevard, Pasadena, California 91125, represents that it is the owner of the entire right, title, and interest in and to U.S. Patent Application Serial No. 10/761,918, filed 1/20/2004, which is a continuation of U.S. Patent Application No. 10/125,133, filed 4/17/2002, by virtue of an Assignment filed and recorded on 5/15/2002, on Reel/Frame 012893/0624, in the United States Patent and Trademark Office, a copy of which is attached hereto as APPENDIX A.

Further, your Petitioner represents that it is the owner of U.S. Patent No. 7,019,339, which issued on U.S. Patent Application No. 10/125,133, filed 4/17/2002, by virtue of the same Assignment. 08/14/2006 HALI11 00000104 10761918

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Your Petitioner, California Institute of Technology, hereby disclaims the terminal part of the term of any patent granted on the above identified patent application which would extend beyond the full statutory term, as shortened by any terminal disclaimer, of U.S. Patent 7,019,339, and hereby agrees that any patent so granted on the above identified patent application shall be enforceable only for and during such period that the legal title to U.S. Patent 7,019,339 shall be the same as the legal title to any patent granted on the above identified patent application, this agreement to run with any patent granted on the above identified patent application and to be binding upon the grantee, its successors or assigns.

In making the above disclaimer, Petitioner does not disclaim any terminal part of any patent granted on the above identified patent application, prior to the full statutory term of U.S. Patent 7,019,339 as defined in 35 U.S.C. §§154-156 and 173, in the event that U.S. Patent 7,019,339 expires for failure to pay a maintenance fee, is held unenforceable or is found invalid in a final judgment by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 CFR §1.321(a), has all claims canceled by a reexamination certificate or as a result of an interference proceeding, or is otherwise not deemed to provide the rights conveyed by 35 USC §154, prior to the full statutory term of U.S. Patent 7,019,339 as defined in 35 USC §§154-156 and 173, except for the separation of legal title stated above. Further, Petitioner does not disclaim any terminal part of a patent granted on the above identified patent application that would extend beyond the present termination of U.S. Patent 7,019,339, in the event that such present term is extended by virtue of compliance with the conditions for term extension of any present or future patent term extension provisions of the patent law, including but not limited to 35 U.S.C. §§155, 155A or 156, and without waiving Petitioner's right to extend the term of a patent granted on the above identified patent application to the extent provided by law.

The undersigned, being the Attorney of Record for the above identified patent application, and duly authorized to act on behalf of Petitioner, certifies that he has reviewed the Assignment attached as APPENDIX A, and to the best of his knowledge and belief, legal title to the above identified patent application and U.S. Patent 7,019,339 rests with Petitioners, California Institute of Technology. The undersigned declares that all statements made herein of his own knowledge are true and that all statements made on information and

belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above-identified application or any patent issuing therefrom.

Respectfully submitted,

Date 8 11 06

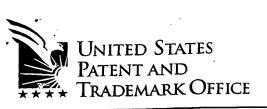
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Leon Radomsky

Attorney for Applicant Registration No. 43,445





Chief Information Officer Washington, DC 20231 www.uspto.gov

JULY 17, 2002

PTAS

MYERS, DAWES & ANDRAS LLP DANIEL L. DAWES 19900 MACARTHUR BOULEVARD SUITE 1150 IRVINE, C.A. 92612



UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 05/15/2002

REEL/FRAME: 012893/0624

NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

ATWATER, HARRY A., JR.

DOC DATE: 04/17/2002

ASSIGNOR:

ZAHLER, JAMES M.

DOC DATE: 04/17/2002

ASSIGNEE:

PATENT NUMBER:

CALIFORNIA INSTITUTE OF TECHNOLOGY 1200 EAST CALIFORNIA BOULEVARD PASADENA, CALIFORNIA 91125

SERIAL NUMBER: 10125133

FILING DATE: 04/17/2002

ISSUE DATE:

SEDLEY PYNE, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

	cket No.: CIT.PAU.05
FORM PTO-1595 (Mcdified) (Rev. 03-01) OMB No. 0651-0027 (exp.5/31/2002) P08/REV03	Patent and Trademark Of
Tab settings → → ▼ 10209493.  To the Honorable Commissioner of Patents and Trademarks	ord the attached original documents or copy thereof
To the Honorable Commissioner of Patents and Trademarks     Name of conveying party(ies):	2. Name and address of receiving party(ies):
Harry A. Atwater, Jr. James M. Zahler	Name: California Institute of Technology
5.15.02	Internal Address:
Additional names(s) of conveying party(ies)	
3. Nature of conveyance:	
∴ ⊠ Assignment ☐ Merger	Street Address: 1200 East California Boulevard
☐ Security Agreement ☐ Change of Name	
☐ Other	City: Pasadena State: CA ZIP: 91125
Execution Date: April 17, 2002	Additional name(s) & address(es) attached?   Yes  No
<ul><li>4. Application number(s) or patent numbers(s):</li><li>If this document is being filed together with a new application</li><li>A. Patent Application No.(s)</li></ul>	n, the execution date of the application is:  B. Patent No.(s)
10/125,133	
Additional numbers atta	ched? □ Yes ⊠ No
<ol><li>Name and address of party to whom correspondence concerning document should be mailed:</li></ol>	6. Total number of applications and patents involved: 1
Name: Daniel L. Dawes	7. Total fee (37 CFR 3.41):\$ 40.00
Internal Address: MYERS, DAWES & ANDRAS LLP	Enclosed - Any excess or insufficiency should be credited or debited to deposit account
3/17/2002 TDIAZ1 00000191 10125133	
l FC:581 40.00 0P	Authorized to be charged to deposit account
Street Address: 19900 MacArthur Boulevard	8. Deposit account number:
Suite 1150 -	01-1960
City: Irvine State: CA ZIP: 92612	(Attach duplicate copy of this page if paying by deposit account)
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<ol> <li>Statement and signature.</li> <li>To the best of my knowledge and belief, the foregoing information of the original document.</li> </ol>	ation is true and correct and any attached copy is a true copy
Daniel L. Dawes	May 7, 2002
Name of Person Signing  Total number of pages including cover sh	Signature Date seet, attachments, and document:

#### **ASSIGNMENT**

CIT Case No. 3453

For good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S),

Harry A. Atwater, Jr.

hereby sells, assigns and transfers to ASSIGNEE, California Institute of Technology, having its statewide administrative offices located at 1200 East California Boulevard, Pasadena, California 91125, and the successors, assigns and legal representatives of the ASSIGNEE, all of its rights, title and interest for the United States and its territorial possessions and in all foreign countries in and to, any and all improvements which are disclosed in the invention entitled:

# A Method of Using a Germanium Layer Transfer to Si for Photovoltaic Applications and Heterostructure Made Thereby

and whic	th is found in	
(a)	U.S. provisional application filed herewith and li	isting the above named persons as inventors
(b)	U.S. patent application filed herewith and listing	the above named persons as inventors
(c) <u>X</u>	U.S. application serial nos. 10/125,133	, filed on04/17/2002
(d)	U.S. Patent No.:	, issued
ASSIGNO and docu to ASSIG execute a for, obtain which ma by the exofficially k	ned for said invention by the above application to 35 USC 111(a) or substitute thereof, and a all International Conventions for the Protection of the Protec	II, upon its request, be provided promptly with all pertinent facts. Patent and legal equivalents as may be known and accessible erence, litigation, or proceeding relating thereto and will prompt live any and all papers, instruments or affidavits required to applied invention and said Letters Patent and said equivalents therefore some the filing date and serial number of said application whereateness and Trademarks to issue said Letters Patent of the Unite
executed	this	Signature of Inventor(s)
17th d	ay of April 2007	Thung A. Atwartin a.

Harry A. Atwater, Jr.

#### **ASSIGNMENT**

CIT Case No. 3453

For good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S),

James M. Zahler

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(c) X U.S. application serial nos. 10/125,133	, filed on04/17/2002	
(d) U.S. Patent No.:	, issued	
and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, continuation-in-part, extension, conversion to 35 USC 111(a) or substitute thereof, and any reissue, reexamination or extension of said Letters Patent and all under all International Conventions for the Protection of Industrial Property;  ASSIGNOR(S) hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;  ASSIGNOR(S) further covenants that the ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation, or proceeding relating thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue or enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof. An attorney of record is authorized and requested by the execution of this assignment to insert into this assignment the filing date and serial number of said application when officially known.  AND the ASSIGNOR(S) requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States and any reissue or extension thereof to the ASSIGNEE, California Institute of Technology.		
States and any reissue of extension thereof to the ASSIG	NEE, Camornia institute of Technology.	
executed this	Signature of Inventor(s)	
17TH day of APRIL, 2002	Tames M. Zahler	